WHIRRAKEE

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MONTHLY NEWSLETTER OF THE

BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
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Secretary/Public Officer	Matt Comer	0409 162 627
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Minute Secretary	general meetings – *vacant*	
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Garden sub-committee	Kerrie Norris, Jess Milroy, Karen Thomas	
Observations coordinator	Richard Goonan	
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Bullying and Harassment Officer	Simon Hay	0410 424 686

Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $40; Family $50; Concession: Single $35; Family $40. *Whirrakee* subscription only is $40.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Hall, Old High Street, Golden Square. The meeting starts with members sharing their recent natural history observations. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 5:30pm. Members of the Committee are the Office Bearer listed above and the following members: Richard Goonan, Karen Thomas, Jess Milroy, Alistair White. *There are two vacancies for committee members*

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Hall, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Hall. Working bees are advertised on the *Whirrakee* diary page.

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188. To propose bird observing excursions please contact Kerrie Norris 5447 8017.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club

Vol. 37, No. 10, November 2016

Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*), which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions should be posted or e-mailed to the editor at least two days prior to the last Wednesday of the month. They will be included as soon as possible after they are received, although space restrictions occasionally require shortening of articles or holding them over till the following edition of *Whirrakee*.

Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note

This month we have a bumper issue due to some longish reports that had to fit in. Of course, there is a lot to say in spring, especially in this unusual year. The excursion report is for those who missed out, and hopefully, reading it, will inspire some members to join more actively in such outings. This has been an amazing season for wildflowers, although some were not as profuse as in other years e.g. Bendigo Wax and many wattles. Perhaps the rain just made them less obvious or shortened the flowering of the very early spring flowers. Spiders must have a fantastic season with so many mosquitoes around…

There will be one more Whirrakee *this year and the next one is in February, so if you need to advertise anything for early next year, please submit it for the December edition (deadline Tuesday 29th November)*

Front page photograph: Doing the good work…and happy about it. Aaron and Nita Hall, Nerrina and Athene Goonan during the Cootamundra removal activity, 22/10 at One Tree Hill (photographed by Richard Goonan)

Short Notices

BFNC Weekly Naturalist Walks – Nature Knowledge Exchange: Saturday 9am-12pm
Club members and visitors (families and students) are invited to join our Weekly Naturalist Walks program running throughout 2016. Walks will visit a range of local areas and provide participants with an excellent introduction to natural history and forest ecology, including birds/plants/fungi/insects, recording observations, and learning/developing field skills. New members and visitors are welcome. Meet at the **Golden Square Hall from 8:50am to register, depart 9:10am. Conclude approximately 12:00pm.** Please carry with you some water and a light snack, and wear clothing suitable for the prevailing conditions. Walks will be short and of easy to moderate difficulty, suitable for anyone with a basic level of fitness.
To find out more, call **Richard (0423418815) or email richard.goonan@optusnet.com.au** or **check the club's website for the latest updates** www.bendigofieldnaturalists.asn.au

Planned destinations for November so far are:
November 5 Mandurang, Nov 12 Axedale

Club Excursions until the end of the year
Currently two more excursions are planned for the remainder of 2016. They are
Sunday November 13th: Kamarooka Daisy Tour Revisited.
Sunday December 4th: Spring Soak and Rock Pool Wetlands of Kooyoora
Check page 14 for details.

Erratum - Brown Goshawk or Collared Sparrowhawk?
When I asked Simon Smith about the source of his identification, he told me he had consulted **Tim Dolby** (not Tim Dunlop). Some of our members may be familiar with him. Apologies if this has caused some confusion.

Naturalist Workshops
Throughout the year, the Club has been running a series of Naturalist Workshops specifically designed to develop participants' proficiency across a broad range of field based naturalist skills and knowledge. They are designed to cater for a wide range of abilities and use a participatory/interactive model, where participants learn from one another in a friendly and welcoming environment.
Workshop 13: *Austrostipa:* Spear Grasses of the Bendigo District
Presenter: Matt Comer
Date: 23 November 2016
Time: 7:00pm, Golden Square Hall
RSVP: Please register your interest via info@bendigofieldnaturalists.asn.au or by post to PO Box 396 Bendigo VIC 3552.
What to bring: Enthusiasm! Specimens and images if you have any, your field guides and notes, paper and pen, your laptop or phone to use apps, etc. A magnifier will be essential. A good quality hand lens is ideal. We will have a few dissecting microscopes available for use on the night (if you have one, bring it along).
More information:
www.bendigofieldnaturalists.asn.au or info@bendigofieldnaturalists.asn.au

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Minards Lane, Wellsford Forest
On a recent visit to the Wellsford forest, we ran into a members of the local fire brigade who told us about a Miss Minard, a woman who, a very long time ago, dug a channel into the forest by hand (for what purposes?).

If you put 'Minards Lane, Longlea' into Google, you can actually see this channel running part way along the lane. Does anybody know something about this history?

Implications for Australia of a 1.5°C future
Published September, 2016 by the Stockholm Environment Institute. Check it out:
https://d3n8a8pro7vhmx.cloudfront.net/auscon/pages/1325/attachments/original/1473314015/Stockholm_Aust_report.pdf

Bendigo Field Naturalists Club year 2015/16
Report of Committee- AGM 14/9/16

This time last year, at our 2015 Annual General Meeting, the club commenced the 2015/16 year without a nomination for president. The following is a report of the committee, prepared in place of the usual president's report. It has been prepared by the secretary and endorsed by committee members.

Also at the last AGM we started the club year with the awarding of life membership to Rob and Cynthia Watkins. Bill Holsworth spoke of their long and outstanding contribution to the club.
The lack of a president has not hindered the operation of the club. At the first meeting of the committee it was decided to rotate the chairing of general and committee meetings amongst committee members. This has proven successful with meetings running effectively.

Among the first business of the committee this year was the appointment of the various sub-committees and roles in the club, the people filling these positions have continued to play a vital role in the running of the club. The committee was also focussed early on continuing the work on policies and procedures to guide club business. This focus has continued through the year. The committee has now adopted several documents as part of an ongoing process. These are the policy and procedures policy, the risk management plan, the financial management policy and procedures and the bullying and harassment policy and procedures.
Other initiatives undertaken by the committee this year have included the trial of a new hall layout for general meetings, production of a Bendigo pottery mug featuring waxflower to commemorate the clubs 70th year (2015), establishment of a club facebook page to promote activities and generate interest and provision of a summary of committee business in *Whirrakee* to help keep members informed. Committee members and other club members made an annual visit to the Huntly pound reserve, for which the club acts as committee of management. We liaised with the Huntly kindergarten bush kinder which uses the reserve. An evacuation plan for the hall is currently being prepared and the committee is currently working through a new hall management agreement with the City of Greater Bendigo. The club has continued to successfully manage the hall through the hall sub-committee and hopefully this will continue.

The club has continued to enjoy excellent presentations by a range of great speakers at general meetings thanks to syllabus organiser Ben Goonan. We began at last years AGM with Steve Meacher and Eric Wilkinson speaking on Leadbeater's possum. Followed by the Bendigo Goldfield groundwater system (Phil Dyson) and Freshwater Crayfish (Robert McCormack). At Christmas we enjoyed good food and company, followed by John Robinsons' Square Tailed Kite Project. We have also heard about bryophytes (Dr Maria Gibson), Shorebirds (Brett Lane), climate coping strategies of geckoes at Mt Korong (Prof. Michael Kearney), what we can learn from listening to nature (Andrew Skeoch), *Entwisleia bella* - a new Australian genus (Tim Entwisle), Vegetation changes in the Victorian alps (Dr John Morgan), and planned burning in box-ironbark forests-investigating the ecological outcomes (Dr Greg Holland). Members have continued to enjoy the re-invigoration of supper after meetings thanks to Alistair and Janet.

The excursion sub-committee has been busy. In October several members enjoyed a campout to Mt Samaria. Excursions have included the Sewage farm bird count, a visit to John Robinsons property, a look at Permian glaciations with Eric Wilkinson at Eppalock, nestboxes with the fauna group, a fungi foray to Mt. Alexander with Joy Clusker (and what a season it has been for fungi!), and a visit to Tang Tang swamp with Ben Goonan.
In April Richard Goonan started the 'wild weekly walks' initiative. Shorter Saturday morning walks have been held at various

localities within easy reach. Just about every corner of Bendigo has been visited including Wildflower drive, Wellsford forest, One Tree Hill, Ravenswood, Whipstick, Kamarooka, White Hills, Salomans Gully, Jackass Flat, Mandurang, Sedgwick and more. These walks have developed a regular and enthusiastic following.
Club members also participated in South East Australian Naturalists Association campouts to Donald and the Geelong area. Members reported the camps were quite successful and recommended them to other members.

A series of workshops have been conducted this year. These have been presented by Ben Goonan, Matt Comer and John McCallum and they have been well supported. Topics of the workshops have included local frog calls, local *Myoporums* and *Eremophilas*, identifying local woodland birds by their calls, swift parrots, Scincid lizards, seeds & seedlings, Eucalypts & EVC's, waxflowers of Bendigo and what is a moss.
The fauna group has been involved in several activities. They have continued their project to survey and monitor nest boxes. This has included revisiting the many existing nest boxes and recording data on location, use, condition and more. They have also worked on curating the clubs skins and specimens collection including documenting, renewing labels etc. The skins were taken to an adventurers club nature day to show to children. The group also held well attended meetings to discuss future projects and activities for the fauna group. Some club members also attended a glider symposium in Seymour.

The garden at the clubrooms has been a focus of activities this year also. The Bendigo Field Naturalists Club sign at the front of the garden was renewed through the efforts of Kerrie Norris with help with installation from Simon Hay. A planting day in memory of Peter Ellis was held in May in conjunction with the City of Greater Bendigo heritage advisory committee. Many native plants were added to the garden and they have benefitted from an ideal season for establishment with regular soaking rains. The garden sub-committee have since held a number of sessions to weed and maintain the new plantings, with the continued support of the City of Bendigo natural reserves staff.

The *Whirrakee* sub-committee has been busy too. They met earlier in the year and decided to recommend to the committee that the latest *Whirrakee* should be posted on the club website each month as a way to encourage interest in the club. The committee voted in favour of this initiative and for most of this year it has been available for download in full colour from the website. More recently it has been decided to offer members the option of receiving *Whirrakee* by email. A number of members have already taken up this option and this will help the club save on the significant and rising costs of printing and postage. The *Whirrakee* folding team has also continued their dedicated work to get the newsletter to your mailbox each month. Sabine, our dedicated editor, has continued to provide the *Whirrakee* at a high standard.

Our long serving librarian and committee member Diana Collier retired from both these roles at the end of 2015. A presentation was made to Diana at the March general meeting to recognise her long and dedicated service and to thank her. Jess Milroy took on the role of librarian. Jess has also represented the club on the City of Greater Bendigo sustainability and environment advisory committee.
At the end of June club members were saddened by the passing of Rob Moors. Rob was a highly valued and respected life member of the club and he will be greatly missed.
The committee would like to thank members of the club for their support. We also thank all those members who have contributed to the life of the club in many and varied ways. As secretary, I would also like to acknowledge the other committee members who have put in considerable effort at committee meetings, extra sub-committee meetings and further work in their own time. We look forward to another good year ahead for the Bendigo Field Naturalists Club.

A visit to the Wellsford forest in early October was just amazing…(photos by Sabine Wilkens)

Left: Golden Pennants, *Glischrocaryon behrii* flowered *en masse*
below: *Westringia crassifolia?* Whipstick Westringia?

below: Hairy Stylewort, *Levenhookia dubia*, a tiny plant, related to trigger plants

This Daphne Heath, *Brachyloma daphnoides* had beautiful red tips on the slender flowers

Several bull ants' nests were seen. Interestingly, they all had one or two sticks across the opening. Are ants placing these deliberately to enable quicker crossing?

Purple Beard Orchid, *Calochilus robertsonii*

Bearded Greenhood, *Pterostylis plumosa*

Orchid spotting on one of the Saturday morning walks (photographed by Joy Clusker)

Blunt Greenhood, *Pterostylis curta*

Many different butterflies were seen this spring. This one is a Red-spotted Jezebel (*Delias aganippe*), mentioned in the October observations on page 10 (photo by Liz Martin)

October Family Nature Club group

Family Nature Club (photos by Joy Clusker)
The top and right photo are from the Family Nature Club excursion, a wildflower walk in the Wellsford. Joy Clusker reported that there was an amazing display of flowers but the mosquitos were swarming…they had an early departure, as despite sprays and long sleeves they were still biting

Rory and Felicity examining a Scarlet Sundew

Left: Albino flowers in certain species are not uncommon (e.g. wax~~lip or~~chids), but finding a white chocolate lily (*Arthropodium strictum* is unusual. This one was mentioned in the October observations on page 10 (photo by Di Davies)

So many different daisies... The November excursion will re-trace a daisy tour in the Whipstick and Kamarooka area. The 'flower' of the daisy is an amazing construction, it is actually a mass of individual flowers, all packed together to make a functional unit (hence the old name for the family 'Compositae'. Take the yam daisy for example: the outer structures, that look like 'petals' are actually individual flowers that have a single, large petal. These flowers have specialised to do a single job – advertising. The inner flowers have another specialised job – reproduction. This division of labour in many daisy flowers is believed to be one reason for their success as a family. Top left: Yam daisy (with hoverfly), Top right: Clustered Everlasting (one of my favourites), middle left: Sticky Everlasting (commonly seen with ants), bottom left and right: unknown daisies from the Grampians. Hopefully there will be many other different daisies during the November excursion (photos by S.Wilkens)

Observations, Sightings and Records

Recording your observations and sightings is a great way to contribute to our understanding of natural history. Don't underestimate your capacity to make a valuable contribution, it's never been easier with the new communication platforms now available. Already in just a few years, many new discoveries have come from simple observations by enthusiastic and inquisitive people with an interest just like you! There are several ways you can easily get involved:

- Email a photo/comment anytime during the month to info@bendigofieldnaturalists.asn.au or richard.goonan@optusnet.com.au
- Visit the clubs website and click on the observations tab and fill in the form
- Text a photo or comment to 0423418815, add your name and other details as appropriate
- Post an observation on the clubs Bowerbird project, ask for help if you're unsure
- Send your observation as a message with a photo or comment via the clubs Facebook page
- Call Richard or any committee member and have a chat anytime during the month
- Take a hardcopy observation form and fill it in before the monthly meeting and bring it along
- If you're comfortable in front of the microphone, briefly report your observation to the meeting in person

Observations contributed through the month will be collated and reported at the monthly meeting. Where possible (e.g. if you provide at least a photo and location) these can also be added to the clubs Bowerbird project as part of the rapidly growing citizen science movement which is transforming our knowledge of biodiversity on a scale previously not possible.

October Observations

collated by Matt Comer and Richard Goonan

Red-spotted Jezebel (*Delias aganippe*), Wildflower Drive near Butcher St, mid September, Liz Martin (see photo on page 7)

Wandering Percher (*Diplacodes bipunctata*), Shelbourne, late September, Richard Goonan.

Green-comb Spider Orchid, Shellbourne, late September, Richard Goonan.

White Bellied Sea Eagle, Spring Gully, mid September, Anne Bridley.

Bronzwing (20), Spring Gully near retirement village, feeding on the ground during late September, Anne Bridley.

Koel (1 male), Eaglehawk, late September, Maurie Lewis. John Robinson also reported that Lindel Rowley heard a Koel about the same time (mid September).

Wombat, Spring Gully, unconfirmed report passed on to Alan Spence.

Square-tailed Kite (dead male underneath old nest), John Robinson. John felt this bird may have suffered from the wet cold weather during September that would have made hunting difficult for this species, and perhaps fatigue also contributed to its death.

Chocolate Lily (*Arthropodium strictum*), white flowered form, Lyell Forest (Gleesons Tk), mid September, Di Davies (see photo on page 8).

Sticky Boobialla (*Myoporum petiolatum* previously known as *M. viscosum*), Wellsford, Matt Comer. One plant found in early September, other two records in this region are from Frank Robins Kamarooka maps. Matt hadn't seen this species in the Wellsford before.

Weekly Naturalist Walks Summary 2016

by Richard Goonan

Beginning in April during the dry start to autumn it was challenging to conceive how a series of weekly walks would sustain interest. It quickly became apparent that no matter the conditions, there is always interesting things to discover once you start looking closely. Some naturalists are renowned for their attention to detail, and this certainly helps when obvious attractions such as showy displays of wildflowers are not present. When discussing the concept of weekly naturalist walks with Ben, his advice was that it didn't

matter what we found per se, the important thing was that we were observing and learning about what was happening in the bush 'in this particular season'. Regular repeated experiences also assist in developing an appreciation of change over time, and beginning our walks just before the rain started falling we were rewarded with the enjoyment of seeing the forest transform as a myriad of fresh green shoots emerged. Throughout the year we have watched as many of these species have grown, flowered profusely, and set their seed capsules. As the late autumn rain continued throughout winter it also sustained an abundant fungi season and a vast array of colours, shapes and forms were located.

During 2016, Weekly Naturalist Walks have visited the following local areas. Salomon Gully (16/4, 3/9), White Hills (23/4), Bennetts Rd (30/4), Wildflower Drive (7/5, 17/9, 8/10), Swift Parrot Survey at Sedgwick (14/5, 6/8), One Tree Hill (21/5, 13/8, 1/10, 8/10, Cootamundra removal 22/10), Wellsford (28/5, 2/7), Mandurang (4/6, 11/6), Jackass Flat (18/6), Ravenswood (25/6), Whipstick (9/7, 20/8), Kamarooka (16/7), Shelbourne (23/7), Spring Gully (30/7), Diamond Hill (27/8), Kangaroo Flat (10/9), Expedition Pass Reservoir Chewton (24/9). By the end of the year our list will include over 30 walks (currently up to 27).

Walks have usually been relatively short, perhaps a few hundred meters or a kilometre or two at most. With attention focused on observation and the diverse discussions and conversations which arise from this, time for walking long distances was not available. This raised some challenges in planning locations for each week's walk, and reduced the scope to (usually) visiting just one spot. This also meant, we needed to avoided excess travel time and restrict the range of locations to within a relatively short drive from town (less than 25 minutes). As a result, the locations were easily accessible for people to revisit in their own time. The half day format has been successful, although challenging to stick to, once out in the bush, and meant that people were more easily able to fit the walks in with other things. Repeated, regular walk also provided opportunity for people to come when possible, and not miss out altogether if one day clashed with another activity.

Two further ideas were part of the initiative behind these walks. Firstly, to visit areas historically known by 'the Club' as places of special interest and introduce (orientate) people to the many areas of local bush. Secondly, to assess the general condition of these areas to determine what actions might be required to maintain them in future. A friendly inclusive atmosphere during the walks has encouraged a great scene of sharing knowledge, building understanding and appreciation for different views, and has allowed people to develop their naturalist interests in a supportive and positive social environment.

Above: Enjoying time in nature together.

Several broad observations can be drawn from this series of walks. Despite the extended period of low rainfall sometimes referred to as the millennium drought, much of the local forest is faring reasonably well. Some areas however, such as parts of One Tree Hill, have declined dramatically, particularly in the last few years. The most obvious impact has been on *Brachyloma daphnoides*, where in some patches almost all mature plants have died. These long lived shrubs have simply got to the end of their capacity to cope with environmental stress. *Hakea decurrens* has also shown some substantial decline following the recent dry summer. More positively however, after the good winter rains, many *Hakea* seedling recruits have also emerged within some patches. At the start of autumn, *Acacia ausfelldii* growing in Solomon Gully looked like there was significant die-off. Early observations that many of these were

beginning to re-shoot were confirmed with subsequent visits, and a glorious display of light golden blossom amongst fresh growth was pleasing to see during late winter.

As the year progressed, and the rain continued falling, it became apparent that this was the 'year of the lilies'. The contrast between seasons was astounding as the forest floor became greener and greener with abundant growth of various tuberous rooted species (among others). This includes native terrestrial orchids, and apart from the four very early autumn flowering species which were not abundant this year, our weekly walks have located and observed nearly all local species in relative abundance. Conversely, when checking a spot in Sedgwick, where *Corybas incurvus* (Helmet Orchid) grows, we noted this winter flowering species had declined. Orchids are well known to fluctuate dramatically from year to year, and this season was certainly at the top of the cycle for most. *Caladenia cuculata* (Hooded Caladenia) for example was particularly abundant in the Whipstick. It was also encouraging to see many seedlings, particularly sun orchids, in some burnt areas, however the variable responses of some orchids to fire (well documented in other research) does leave the impression they decline or appear less abundantly in the immediate post fire years. Observations through the year from some sites with a longer time since fire indicated some populations/species continue to survive well.

Birds have generally been less numerous, partly due to the poor conditions for observation (wet, windy, cold). Some highlights have included three red-capped robin nests (White Hills, Shelbourne, and Whipstick), and Flame Robins seen early in the year at White Hills and Wellsford. Two species that were heard-but-not-seen included the elusive shy heath wren (Kamarooka) and crested bell bird (Wellsford). Although during the weekly walks, no swift parrots were recorded, this year on the two survey weekends, a good range of other typical local species were seen in association with patches of abundant Yellow Gum and Red Box blossom at Sedgwick. Their response to temporary resource availability was evident with few of any species recoded on earlier visits to the same location/s when blossom was absent.

Observing post-fire regeneration at sites previously burnt for fire management has also been an irregular part of the walks. Because the application of planned burning at current levels has only been implemented recently (starting about 10 years ago), visiting these areas is important in developing an understanding of species responses and ecological processes. Due to the un-natural long term exclusion of fire in this region, nobody knows what the real long term effects of the new regime will be, so ground-truthing concepts and ideas with ongoing field observations is required. When the extent of planned burning began to increase 10 years ago, I was obviously very concerned, however, I also realised that it was important not to allow my preconceptions and un-tested assumptions to mislead my understanding of the actual effects. In many areas we visited, the 'healthiest' and most vigorously growing parts of the forest (despite the recent hot summers), were previously been burnt areas. Regeneration in Salomon Gully, Diamond Hill, Wellsford, Jackass Flat, Whipstick and One Tree Hill, clearly demonstrated the capacity of many species to recover, with some appearing to respond quite positively. Although the time for 'recovery' varies depending on prevailing seasonal conditions following fire, the vigorously growing plants we have observed are what creates and sustains habitat resources for insects, birds and other fauna over the long-term.

We also visited many unburnt areas and found examples of recruitment occurring and mature plants re-shooting. In some areas however, where natural disturbance processes like fire have been artificially suppressed it's distressing to see increasing numbers of dead shrubs that will never re-sprout or set seed again and no (or relatively little) seedling recruitment occurring to replace them. For example, in areas on the upper slopes of Wildflower Drive and parts of One Tree Hill, the heathy understory has significantly declined (slowly died-out). Without sufficient recruitment, despite recent wet years in 2010/

2011/2014, the populations of shrub species that form this habitat have not been sustained or regenerated. It appears the result of unnatural long-term fire exclusion has been potentially more detrimental than an irregular fire regime.

Digital technology has taken considerable advances in recent years with Smartphone applications becoming pervasive across the spectrum of online information sharing services now available. The newly updated VicFlora has featured regularly on our walks allowing access to the latest species names and descriptions, of which there are many. While not everybody's 'cup of tea', the potential learning experience enabled by access to such information is worth exploring, and looks to be quickly developing in exciting new ways. Who would have thought, even just a few years ago, that you would now be able to carry a full interactive version of the Flora of Victoria volumes (about 3000 pages) in your shirt pocket?

A good year for the native plants is also a good year for weeds and there was abundant growth following 100mm of rainfall in late September/early October. Throughout winter, particularly after a visit to the Whipstick, we observed Cape Weed germinating in Kangaroo faeces. This is of particular concern because although Cape Weed has long been prevalent in paddocks surrounding many bushland areas, it has previously been very limited in its extent and capacity to invade areas within parks. Seedlings of Cape Weed (and occasionally Gazania) were found well away from any large source populations growing outside bushland areas. Weeds spread by kangaroos is an issue that will require close attention in future, with measures such as targeted weeding necessary at important sites if we wish to maintain low levels of exotic species such as Cape Weed.

To compound this adverse impact, we also observed at the Whipstick, Solomon Gully, and Spring Gully, the considerable physical damage Kangaroos can do. This includes crushing large areas of vegetation where they lay, and smashing it down along their numerous paths. Additionally, the impact of Wallabies was seen in Mandurang, where early in the year thousands of *Pterostylis smaragdyna* shoots were eaten, resulting in only a handful of flowering shoots surviving to maturity.

During October, a Cootamundra removal activity targeted a small (but significant) patch in One Tree Hill. A planned burn in the area five years ago stimulated the germination of seed from five mature plants, resulting in 500 seedlings (recruits) and increasing the area of the patch to about 40mx50m across the slope. By capitalising on the effect of the planned burn (seed bank germination trigger) with a targeted proactive intervention, a significant proportion of the seed bank has now been totally removed before additional seed has been produced (i.e. no mature plants remaining). Ongoing monitoring of the site will enable effective control over the long-term.

Next year? After a very successful year of Weekly Naturalist Walks, where will this initiative go in future? Will more members come along and enjoy the opportunity to share knowledge and time with like-minded people? Will interest continue to grow in the wider community seeing more visitors becoming new members? The value and ease of running regular walks has been demonstrated, will other members lead a walk of their own (thanks Aaron for stepping in when I was away in October)? Anyone with ideas for improving the walks, suggestions for locations to visit, thoughts on promoting the walks to a wider audience, or to provide other feedback, please contact Richard. Finally I would like to thank all the members and visitors with whom I have enjoyed our weekly walks this year.

Left: Cape Weed seedling germinating from a Kangaroo faeces.

Committee Notes, 19th October 2016
New and on-going business included the following items:

- *The committee thanks members who have renewed their 2016-2017 membership. Memberships are due in September and we are asking all those who are still to renew to do so asap please.*
- Investigation into the best way of recording speakers' presentations at Club general meetings is continuing.
- The agreement with the City of Greater Bendigo re management of the Golden Square Hall was signed.
- A process for allocating funds from the Projects Account is to be considered at the February committee meeting.

November Excursion: Kamarooka Daisy Tour Revisited.
Date **Sunday November 13th**
Leaders: Richard Goonan, Matt Comer, Ben Goonan
Meet: Main Street Huntly, Opposite NCCMA Office. (To reduce unnecessary travel time, please make your own way to Huntly – car-pooling will still be possible)
Time: Registration 8:45am, Depart 9:00am sharp (phone Richard if your running late)
Return: Via the Whipstick area to Eaglehawk, aiming to return to Club rooms approx. 5:00pm. If a half day option is preferred, you can return to Bendigo any time via Tennyson Rd.
Description: Enjoy a tour through Grassy Woodlands, Mallee, and Box-Ironbark Forest areas identifying a range of local 'daisy' (Asteraceae) species with the Club's expert botanists Ben Goonan and Matt Comer. At least 20 species of 'daisy' can be found through the Kamarooka/Whipstick areas at this time of year, the excursion will follow a route described by Graham Hill and probably conducted as an excursion many years ago.
Distance: Approx. 80km driving (suitable for 2wd), lunch approximately 12:30pm in the Kamarooka.
Equipment: Insect repellant! Bring all the usual gear: binoculars, telescope, tripod, sound recorder, camera, note book and pen, smart phone, field guides, field press, maps, toilet paper, ground sheet, hat/sunscreen, wet weather gear, change of clothes, snacks, lunch and plenty of water.
Contact/Information: Richard Goonan 0423418815

December Excursion: Spring Soak and Rock Pool Wetlands of Kooyoora
Date: **Sunday December 4th** (Note – this excursion is before the general meeting)
Leaders: Richard Goonan, Ben Goonan
Meet: BFNC Clubrooms Old High St, Golden Square.
Time: Registration 8:45am, Depart 9:00am sharp (phone Richard if you are running late)
Return: Travel to Kooyoora via Inglewood, return via same route to be at clubrooms approx. 5:00pm. If a half day option is preferred, you can return to Bendigo any time via own route.
Description: Enjoy a day exploring the Spring Soak and Rock Pool Wetlands of the Kooyoora area and learn about the botanical, ecological, hydrological and geomorphological characteristics of these fascinating ecosystems from ecologist Ben Goonan.
Distance: Approx. 160km driving return (suitable for 2wd), lunch approx. 12:30 pm in the Kooyoora area as appropriate.
Equipment: Insect Repellant! Bring all the usual gear: binoculars, telescope, tripod, sound recorder, camera, note book and pen, smart phone, field guides, field press, maps, toilet paper, ground sheet, hat/sunscreen, wet weather gear, change of clothes, snacks, lunch and plenty of water.
Contact/Information: Richard Goonan 0423418815

CSIRO monographs of invertebrate groups
Groups covered include cockroaches, stick and leaf insects, dragonflies, butterflies and water mites. All titles may be purchased on-line at http://www.publish.csiro.au/

Diary

All Club meetings are held at the Golden Square Hall, Old High St Golden Square, unless otherwise indicated.

Wednesday, 9th November 7.30pm
Steve Williams (BFNC) is the speaker for November. His topic is 'Lepidopteran Ecology'. All are welcome.

Excursions

Saturday: Weekly Naturalist Walks
Non-members welcome, family friendly
Weekly from 8:50am to 12pm (no cost)
Meet at Golden Square Hall
Contact Richard (0423418815)
Email richard.goonan@optusnet.com.au
For more details, see page 3. Destination for November so far are:
November 5, Mandurang
November 12, Axedale.

November Excursion: Kamarooka Daisy Tour Revisited.
Date **Sunday 13th November**
Leaders: Richard Goonan, Matt Comer, Ben Goonan. For details, see page 14.

December Excursion: Spring Soak and Rock Pool Wetlands of Kooyoora
Date: **Sunday 4th December**
Leaders: Richard Goonan, Ben Goonan
For details, see page 14.

BFNC Workshop

Workshop 13: *Austrostipa:* Spear Grasses of the Bendigo District
Presenter: Matt Comer
Date/Time: 23rd November 2016, 7.00pm
Time: 7:00pm, Golden Square Hall
RSVP: Please register your interest via info@bendigofieldnaturalists.asn.au or by post to PO Box 396 Bendigo VIC 3552.

See page 3 for what to bring and other details

SEANA Camp 2017 – first information

The 2017 camp will be held over the extended weekend of 17-20 March, based in Sale in Central Gippsland.
Matt Comer and Sabine Wilkens have information about accommodation options (including group accommodation package), the extensive and interesting program, as well as the registration form.
Forms and payment are due by Friday 20 January 2017

Family Nature Club

The Nature Club activities are continuing in 2016, so look out for announcements or check out their website. **Registration:** Bendigonatureclub@gmail.com or 5443-1326
http://bendigofamilynatureclub.blogspot.com.au

Wildlife Rescue & Information Network Inc.

W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.
WRIN meetings held on the 1st Saturday of February, April, June, August, October and December at 1pm the Golden Square Hall

Bendigo Native Plant Group meeting.

All interested people are welcome to come along. Meeting starts at 7:30pm on the third Tuesday of the month, Golden Square Hall. The next meeting is on the 15th November.

Recently published book

Name Those Grasses by Ian Clarke. This 536-page volume is densely packed with information about the classification, floral structure and field identification of sedges, rushes and grasses. It is copiously illustrated with colour photos of high technical quality and beautifully executed black and white line drawings...a Christmas present?